October 2. Please share this testimony with committee members and note them in the meeting's minutes. Thank you, frank

Dear House Energy and Technology Committee,

Michigan has major energy deficiencies that are hurting our economy and environment. They are:

- uncompetitive electric rates
- over reliance on coal
- inadequate electric and heating efficiency and policies

It is in the economic best interest of Michigan to maximize our electric and heating energy efficiency. Here's why.

Michigan's electric rates are not competitive

Michigan has some of the highest electric rates in the country being higher than in 37 US states and all other Midwestern states. Our residential rates are higher than in 39 states.

Electric rates in Michigan have increased 27% over the past 5 years compared with only a 12% increase for the Midwest and 5% for the US in total. The main reason for this increase is our over reliance on coal generation. Michigan utilities are further away from Wyoming PRB mines than most states that burn this coal and transportation costs (mostly diesel) account for most (75%) of the delivered price of coal. http://www.eia.gov/electricity/monthly/

Michigan ratepayers could have saved 16% or \$1.8 Billion on their electric bills in 2012 if we had the same overall electric rate as the Midwest average (9.29 cents/kWh vs. 11.02 cents/kWh in MI. = $16\% \times 11.5 billion in annual utility electric sales.) http://www.eia.gov/electricity/monthly/

One way to lessen the economic burden of high utility rates on Michigan residents and businesses is to increasing our electric and heating energy efficiency.

Michigan homes are less energy efficient than those in other Midwestern states (EIA) The EIA compared Michigan homes with those in 10 other Midwestern states and found our homes are:

- Draftier and poorly insulated
- Our homeowners pay more than in any MW state to heat their homes
- We keep the heating temperature higher
- We are much less likely to clean our furnaces
- We also have a lower percentage of Energy Star rated appliances and electronics
- and a lower percent CFL light bulbs

http://www.eia.gov/consumption/residential/

About two fifths of Michigan seniors (38 percent) said they currently find it hard to pay their utility bills.

http://www.prnewswire.com/news-releases/survey--80-percent-of-michigan-residents-support-upgrading-states-power-lines-to-create-thousands-of-new-jobs-140152443.html

Michigan is behind other states in energy efficiency goals

Michigan's Energy Efficiency Resource Standard (EERS) is the weakest in the Midwest. All other Midwestern states have higher Energy Efficiency Resource Standard (EERS) for electricity (1.5% to 2.0%) and natural gas (1.0% to 1.5%) http://www.aceee.org/sector/state-policy

Michigan energy efficiency programs have saved money, cut pollution EO programs are successful. 2011 EO expenditure of \$205 million (gas and electric) resulted in lifecycle savings to customers of at least \$709 million. This means that for every dollar spent on EO programs in 2011, customers realized benefits of \$3.55. http://www.michigan.gov/documents/mpsc/2012_EO_Report_404891_7.pdf

Over the five-year period from 2011- 2015, the cumulative benefits to Michigan customers are expected to be in excess of \$2.5 billion.

EO programs have retained of hundreds of millions of dollars in fuel costs that would have been exported to other states in order to import energy to Michigan.

Since Michigan relies heavily upon coal-fired generation, the 2011 EO program is credited with reducing the emission of over 2.2 billion pounds of carbon dioxide, 13 million pounds of sulfur dioxide and 6 million pounds of nitrogen oxide.

However, Michigan needs stronger EO and other efficiency policies to become more competitive.

Energy efficiency programs are far less expensive than new electric generation. The MPSC reports that efficiency is far the cheaper than new electric generation. They report the statewide average levelized cost of EO is \$20/MWh, significantly cheaper than new natural gas combined cycle generation at \$66/MWh, or new coal generation at \$111/MWh. Even with wind generation declining in price to as low as \$40/MWh, energy efficiency is cheaper.

Michigan voters support increasing energy efficiency efforts A survey of 900 Michigan voters found:

- 77 percent of voters in Michigan support expanded use of energy efficiency technologies to help meet our energy needs and reduce energy costs.
- There's a strong bipartisan consensus on the issue with 84 percent of Democrats, 76 percent of independents, and 69 percent of Republicans supporting energy efficiency standards.
- In additional to federal action, 58 percent of voters would like the state government to require electric utilities like Detroit Edison and Consumers Energy to help their customers become more energy efficient. http://www.nrdc.org/media/2011/110915.asp

Michigan Climate Action Council (MCAC) recommended a 2% annual electric savings goal

The MCAC was composed of representatives from industry, utilities, government, academia, environmental groups and others. This broad based group determined that Michigan needed to strengthen our Energy Optimization Program to 2% electric savings

per year. MCAC findings are still timely and great source of information. http://www.michigan.gov/deg/0,1607,7-135-50990-213752--,00.html

Conservative US Business Associations support strong energy efficiency legislation National Association of Manufacturers: "Energy efficiency is a critical to our nation's ability to succeed economically." A statement made by National Association of Manufacturers President and CEO Jay Timmons in support of bipartisan federal legislation. "The Energy Savings and Industrial Competitiveness Act, S.1000, which will help spur the use of energy efficiency technologies for commercial, industrial and residential use, creating jobs in the process." http://www.nam.org/Communications/Articles/2013/04/Manufacturers-Energy-Efficiency-is-Key-to-Our-Nations-Energy-Future.aspx

A <u>Business Roundtable</u> policy item states: "Ensure that state legislatures and public utility commissions consider policies that promote investment in cost-effective energy efficiency measures."

http://businessroundtable.org/uploads/general/5_Energy%20Efficiency%20One-Page%20Overview.pdf

<u>US Chamber of Commerce</u>: "Putting into practice more robust energy efficiency programs is a crucial component of our nation's energy security. We can free up significant amounts of energy for more productive purposes and eliminate unnecessary expenditures on the part of both businesses and consumers." http://www.uschamber.com/reports/increasing-americas-energy-efficiency

<u>Small Business Majority</u>: "87% of small business owners believe that improving innovation and energy efficiency are good ways to increase prosperity for small businesses." http://www.smallbusinessmajority.org/small-business-research/clean-energy/energy-innovation.php

Stronger EO programs could help residents and businesses in all Michigan cities Detroit ranked 33 out of 34 of the most populous U.S. cities on their policies and other actions to advance energy efficiency. (Probably many other Michigan cities also need efficiency guidance.)

http://www.aceee.org/sites/default/files/publications/researchreports/e13g.pdf

Improving energy efficiency is a continual process with many opportunities emerging

The idea that we will soon run out of energy efficiency opportunities is very short sides. Note, zero energy homes and buildings have already been built in Michigan and northern states. Perhaps these could serve as our goal. http://www.invisionzerohome.com/ http://www.invisio

Residential, commercial and industrial users have considerable energy efficiency improvement to achieve. An industry study finds industrial users currently waste 25% of their energy, while commercial and residential users waste 50%. http://www.greenbang.com/us-industry-wastes-way-too-much-energy-coalition-says 21612.html

Energy efficiency technology for residential, commercial and industrial applications is quickly evolving and declining in price. Five years ago we starting to embrace CFL light bulbs and today LEDs are the new standard. New appliances, air conditioning, industrial motors and many other electric products at up to 50% more efficient than they were just 10 years ago.

Recommendations

While increasing energy efficiency seems intuitive, it is often overlooks by residents and business. State, federal and other actions are needed to create awareness, provide information and motivate actions that increase energy efficiency and help our economy. Decision makes should consider:

- Raising the EO electric savings goal to 2% per year and the natural gas savings goal to 1.5% plus raise the spending cap.
- Michigan is ranked 12th in the 2012 ACEEE State Energy Efficiency Scorecard. This report identifies Michigan's shortcomings and opportunities for policy improvement in public benefit programs, building codes, combined heat and power and appliance and other standards. http://www.aceee.org/sites/default/files/publications/researchreports/e12c.pdf
- Maximize our smart meter potential, demand response, energy performance contracting, combined heat and power, geothermal heating, Property Assessed Clean Energy (PACE), etc.
- Require all new homes and other buildings to have energy ratings and labels. The Arkansas Economic Development Commission Energy Office (AEO) just announced it will promulgate rules that require this of homes. http://www.seealliance.org/Portals/0/pdfs/ar-codes-release-9-9-13.pdf

Stronger energy efficiency policies would benefit Michigan's residents, businesses, economy and environment.

Frank Zaski Franklin, Mi.

DTE and CMS shareholder, ratepayer, energy activist, concerned citizen Former work group member of the Michigan 21st Century Energy Plan, Michigan Climate Action Commission and Midwest Governors Renewable Energy Advisory Group